

FARMING IN THE 21ST CENTURY

by

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Preface

The U.S. agricultural industry is in the midst of major structural change — changes in product characteristics, in worldwide production and consumption, in technology, in size of operation, in geographic location. And the pace of change seems to be increasing. Production is changing from an industry dominated by family-based, small-scale, relatively independent firms to one of larger firms that are more tightly aligned across the production and distribution chain. And the input supply and product processing sectors are becoming more consolidated, more concentrated, more integrated.

Agriculture in the 21st century is likely to be characterized by: 1) adoption of manufacturing processes in production as well as processing, 2) a systems or food supply chain approach to production and distribution, 3) negotiated coordination replacing market coordination of the system, 4) a more important role for information, knowledge and other soft assets (in contrast to hard assets of machinery, equipment, facilities) in reducing cost and increasing responsiveness, and 5) increasing consolidation at all levels raising issues of market power and control.

These profound changes in the agricultural industry present new challenges and new opportunities that require new ideas and concepts to analyze and implement. They require new learning and thinking. Some of those new ideas and concepts are presented here, not as empirically verified truths, but as “thoughts” to stimulate different and better thinking. They have been developed based on observations, analysis and discussions with numerous managers and colleagues in agribusinesses in North America and Europe. This series focuses on Farming in the 21st Century; companion series are also available on Financing and Supplying Inputs to the 21st Century Producer (Staff Paper 99-11), and Value Chains in the Food Production and Distribution Industries (Staff Paper 99-10).

Our purpose in sharing these “thoughts” is to invite discussion, dialogue, disagreement — in general to encourage others to develop better “thoughts”.

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On Being a General Manager

Most successful farmers might be best described as hands-on, walk-around managers. Their success comes in large part because of their intimate involvement in the operations of the business. They know the production technology, the farrowing schedule, the field operations, the machinery operational performance and maintenance issues — in essence the daily functioning and operations of the plant better than most foreman in an industrial plant setting. But as farm businesses expand, it becomes increasingly difficult for the farm manager to have this level of intimate knowledge about his plant. He no longer runs the combine — an employee does that. He doesn't do all the machinery maintenance; he doesn't run the feed mill or the feed truck to feed the cattle; he doesn't scout the fields for insects or weeds. Increasingly, agriculture is looking a lot like other industries where employees do most of the physical work, herdsmen manage daily operations and are equivalent to the foreman of an industrial plant in terms of responsibility, and the “farmer” — to be successful in this increasingly complex agricultural industry — must function as a general manager.

To be successful in the 20th century the farmer/grower was required to be a good plant manager. If they were able to control cost, increase efficiency and productivity, be timely in operations, and generally operate the farm — the plant — effectively and efficiently, they could be successful. And success was measured primarily by being a low cost producer with high yields and productivity.

But production agriculture is going through a major structural realignment. The changes that are part of this realignment can be characterized as: 1) adoption of manufacturing processes in production as well as processing, 2) a systems or food supply chain approach to production and distribution, 3) negotiated coordination replacing market coordination of the system, 4) a more important role for information, knowledge and other soft assets (in contrast to hard assets of machinery, equipment, facilities) in reducing cost and increasing responsiveness, and 5) increasing consolidation at all levels raising issues of market power and control. In general we are observing the application of modern industrial manufacturing, production, procurement, distribution, and coordination concepts to the food and industrial production supply chain. These changes suggest a new management paradigm will be important to be successful in the future.

The successful farm managers of the 21st century must not just be outstanding plant managers, they must also be successful general managers. General managers are concerned about managing people or personnel; managing money and resources; and negotiating and managing relationships with buyers and sellers, landlords and lenders, and investors and alliance partners. They know how to effectively use not only the skills of plant managers and other personnel within the business, but consultants and advisors from outside the business. General managers worry not only about cost, efficiency and productivity — but about labor productivity, capital turnover ratios, profit margins, return on assets, and return on equity. General managers think strategically — they think about the long-term future of their business.